

Patent Claims

It is claimed:

1. External electrodes (3, 4, 8) on piezoceramic multilayer actuators (1), composed of a layer of a basic metallization (3) applied to the ceramic material (2) of the surface of the actuator (1), to which metallization there is joined by means of a joining layer (8) a reinforcing layer (4) to which a connecting wire (5) is soldered, characterized in that the layer of basic metallization (3) is structured (15) by discontinuities or recesses (17).
2. External electrodes according to Claim 1, characterized in that the structure (15) of the basic metallization (3) is composed of a printed pattern of a suitable termination paste, which printed pattern has been produced by means of a printing method.
3. External electrodes according to Claim 1, characterized in that the structure (15) of the basic metallization (3) is formed by a mechanical, chemical or electrochemical removal in a layer of the basic metallization (3) applied over the entire area.
4. External electrodes according to Claim 2 or 3, characterized in that the basic metallization (3) is composed of a suitable termination paste that has the composition Ag_xPd_y , where $x + y = 1$ and $1 > x > 0$, but preferably $1 > x > 0.7$.
5. External electrodes according to Claim 1, characterized in that the structure (15) of the